

WHAT IS CLAIMED IS:

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1. A coordinate input device for generating a beam spot by irradiating a predetermined position of a coordinate input surface with light coming from a pointing tool, and generating a coordinate value corresponding to the beam spot, comprising:
- a plurality of sensing means, arranged for at least one coordinate axis, for sensing the beam spot;
 - measurement means for measuring levels of data sensed by said plurality of sensing means;
 - comparison means for comparing the levels measured by said measurement means;
 - selection means for selecting a sensing result of one of said plurality of sensing means on the basis of a comparison result of said comparison means; and
 - output means for outputting a coordinate value corresponding to the beam spot on the basis of the sensing result selected by said selection means,
- wherein light-receiving areas of said plurality of detection means have an overlapping portion.
2. The device according to claim 1, wherein each of said plurality of sensing means has a linear array of a plurality of photoelectric conversion elements.
3. The device according to claim 2, wherein said output means comprises computation means for computing the coordinate value corresponding to the beam spot at

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resolving power not less than the number of pixels
corresponding to the plurality of photoelectric
conversion elements.

4. The device according to claim 1, wherein said
5 output means comprises storage means for storing a
reference coordinate value in the overlapping portion,
and

said output means outputs the coordinate value
corresponding to the beam spot using the reference
10 coordinate value.

5. The device according to claim 1, wherein the
overlapping portion is defined by light-receiving areas
of neighboring ones of said plurality of sensing means.

6. A method of controlling a coordinate input device
15 for generating a beam spot by irradiating a
predetermined position of a coordinate input surface
with light coming from a pointing tool, and generating
a coordinate value corresponding to the beam spot,
comprising:

20 a measurement step of measuring levels of data
detected by a plurality of sensors, which are arranged
for at least one coordinate axis and adapted to sense
the beam spot;

a comparison step of comparing the levels
25 measured in the measurement step;

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a selection step of selecting a sensing result of one of the plurality of sensors on the basis of a comparison result in the comparison step; and

an output step of outputting a coordinate value
5 corresponding to the beam spot on the basis of the sensing result selected in the selection step,

wherein light-receiving areas of the plurality of sensors have an overlapping portion.

7. The method according to claim 6, wherein each of
10 the plurality of sensors has a linear array of a plurality of photoelectric conversion elements.

8. The method according to claim 7, wherein the output step computes the coordinate value corresponding to the beam spot at resolving power not less than the
15 number of pixels corresponding to the plurality of photoelectric conversion elements.

9. The method according to claim 6, wherein the output step stores a reference coordinate value in the overlapping portion in a storage medium, and

20 the output step outputs the coordinate value corresponding to the beam spot using the reference coordinate value.

10. The method according to claim 6, wherein the overlapping portion is defined by light-receiving areas
25 of neighboring ones of the plurality of sensors.

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11. A computer readable memory which stores a program
code of controlling a coordinate input device for
generating a beam spot by irradiating a predetermined
position of a coordinate input surface with light
5 coming from a pointing tool, and generating a
coordinate value corresponding to the beam spot,
comprising:

a program code of a measurement step of measuring
levels of data detected by a plurality of sensors,
10 which are arranged for at least one coordinate axis and
adapted to sense the beam spot;

a program code of a comparison step of comparing
the levels measured in the measurement step;

a program code of a selection step of selecting a
15 sensing result of one of the plurality of sensors on
the basis of a comparison result in the comparison
step; and

a program code of an output step of outputting a
coordinate value corresponding to the beam spot on the
20 basis of the sensing result selected in the selection
step,

wherein light-receiving areas of the plurality of
sensors have an overlapping portion.